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Nebraska Summary: S124 Massey Ferguson 3660

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SUMMARY OF OECD TESTS 1266 & 1267—NEBRASKA SUMMARY 124 MASSEY FERGUSON 3660 DIESEL (2WD & FWA) 16 SPEED

POWER TAKE-OFF PERFORMANCE

Power HP (kW)	Crank shaft speed rpm	Fuel Consumption			Mean Atmospheric Conditions
		Gal/hr (l/h)	lb/hp.hr (kg/kW.h)	Hp.hr/gal (kW.h/l)	
MAXIMUM POWER AND FUEL CONSUMPTION					
Rated Engine Speed—(PTO speed—1054 rpm)					
141.2 (105.3)	2203	8.09 (30.61)	0.408 (0.248)	17.46 (3.44)	
Standard Power Take-off Speed (1001 rpm)					
138.7 (103.4)	2092	7.72 (29.21)	0.396 (0.241)	17.97 (3.54)	Air temperature
VARYING POWER AND FUEL CONSUMPTION					
141.2 (105.3)	2203	8.09 (30.61)	0.408 (0.248)	17.46 (3.44)	66°F (19°C)
122.2 (91.1)	2240	7.29 (27.61)	0.426 (0.259)	16.76 (3.30)	Relative humidity
90.1 (67.2)	2257	5.96 (22.57)	0.470 (0.286)	15.12 (2.98)	38%
62.5 (46.6)	2268	4.77 (18.05)	0.542 (0.330)	13.10 (2.58)	Barometer
31.4 (23.4)	2280	3.39 (12.83)	0.768 (0.467)	9.26 (1.83)	33.4" Hg (113.0 kPa)
.....	2289	1.57 (5.95)	

Maximum Torque 399.5 lb. ft (541.6 Nm) at 1321 RPM

Maximum Torque Rise 18.6%

DRAWBAR PERFORMANCE FUEL CONSUMPTION CHARACTERISTICS

Power Hp (kW)	Drawbar pull (kN)	Speed mph (km/h)	Crank- shaft speed rpm	Slip %	Fuel Consumption lb/hp.hr (kg/kW.h)	Hp.hr/gal (kW.h/l)	Temp. °F (°C) cool- ing med	Air dry bulb	Barom. inch Hg (kPa)
Maximum Power—11th (2R) Gear									
117.2 (87.4)	5955 (26.5)	7.38 (11.87)	2199	7	0.439 (0.267)	16.24 (3.20)	183 (84)	57 (14)	30.2 (102.3)
75% of Pull at Maximum Power—11th (2R) Gear									
92.1 (68.7)	4475 (19.9)	7.72 (12.42)	2245	5	0.506 (0.308)	14.06 (3.27)	183 (84)	57 (14)	30.2 (102.3)
50% of Pull at Maximum Power—11th (2R) Gear									
64.0 (47.7)	3035 (13.5)	7.91 (12.73)	2259	3	0.628 (0.382)	11.32 (2.23)	181 (83)	57 (14)	30.2 (102.3)
75% of Pull at Reduced Engine Speed—12th (2R+S) Gear									
93.1 (69.4)	4520 (20.1)	7.72 (12.43)	1781	5	0.439 (0.267)	16.24 (3.20)	183 (84)	57 (14)	30.2 (102.3)
50% of Pull at Reduced Engine Speed—12th (2R+S) Gear									
63.4 (47.3)	2990 (13.3)	7.95 (12.80)	1799	3	0.524 (0.319)	13.55 (2.67)	178 (81)	57 (14)	30.2 (102.3)
MAXIMUM POWER IN SELECTED GEARS									
7th (4T) Gear									
96.2 (71.7)	9420 (41.9)	3.83 (6.16)	2238	14	0.534 (0.325)	13.35 (2.63)	183 (84)	57 (14)	30.2 (102.3)
8th (1R) Gear									
110.6 (82.5)	9330 (41.5)	4.45 (7.16)	2236	12	0.472 (0.287)	15.08 (2.97)	180 (82)	57 (14)	30.2 (102.3)
9th (4T+S) Gear									
111.6 (83.2)	8540 (38.0)	4.90 (7.88)	2222	11	0.498 (0.303)	14.31 (2.82)	183 (84)	57 (14)	30.2 (102.3)
10th (1R+S) Gear									
115.4 (86.0)	7465 (33.2)	5.80 (9.33)	2207	9	0.434 (0.264)	16.40 (3.23)	185 (85)	57 (14)	30.2 (102.3)
11th (2R) Gear									
117.2 (87.4)	5955 (26.5)	7.38 (11.87)	2199	7	0.439 (0.267)	16.24 (3.20)	189 (87)	57 (14)	30.2 (102.3)
12th (2R+S) Gear									
114.9 (85.7)	4540 (20.2)	9.45 (15.27)	2190	5	0.478 (0.291)	14.87 (2.93)	183 (84)	57 (14)	30.2 (102.3)
13th (3R) Gear									
114.9 (85.7)	4110 (18.3)	10.48 (16.86)	2228	5	0.455 (0.277)	15.63 (3.08)	180 (82)	57 (14)	30.2 (102.3)

Location of Test: Groupement Antony, BP 121 92164 Antony, France

Dates of Test: February and March, 1990

Manufacturer: MASSEY FERGUSON S.A. Avenue Blaise Pascal, BP307 60026 Beauvais, France

FUEL AND OIL: Fuel No. 2 Diesel Cetane No. NA Specific gravity converted to 60°/60°F (15°/15°C) 0.855 Fuel weight 7.12 lbs/gal (0.853 kg/l) Oil SAE 10W30 Oil consumption for 10 hours NA Transmission and hydraulic lubricant B.P. Agrotans SAE 80W90 API GL-4 Front Axle lubricant B.P. Agrotans SAE 80W90 API GL-4

ENGINE: Make Perkins Diesel Type six cylinder vertical with turbocharger Serial No. YB 31236 U504 791 S Crankshaft lengthwise Rated engine speed 2200 Bore and stroke 3.937" × 5.00" (100 mm × 127 mm) Compression ratio 16.0 to 1 Displacement 365 cu in (5985 ml) Starting system 12 volt Lubrication pressure Air cleaner two paper elements and aspirator Oil filter two full flow cartridges Oil cooler engine coolant heat exchanger for crankcase oil Fuel filter two paper elements Muffler underhood Exhaust vertical Cooling medium temperature control thermostat and variable speed fan

CHASSIS: Type 2WD and FWA Serial No. P 345 024 Tread width rear 62.5" (1588 mm) to 85.8" (2180 mm) front 2WD - 60.7" (1543 mm) to 91.9" (2333 mm) FWA - 66.4" (1686 mm) to 85.5" (2171 mm) Wheel base 109.1" (2770 mm) Hydraulic control system direct engine drive Transmission selective gear fixed ratio with partial (2) range operator controlled powershift Nominal travel speeds mph (km/h) first 1.45 (2.33) second 1.83 (2.95) third 2.28 (3.66) fourth 2.92 (4.70) fifth 3.11 (5.00) sixth 3.93 (6.32) seventh 4.32 (6.95) eighth 5.01 (8.07) ninth 5.46 (8.78) tenth 6.34 (10.20) eleventh 7.88 (12.68) twelfth 9.96 (16.03), thirteenth 10.76 (17.31) fourteenth 13.60 (21.88) fifteenth 14.94 (24.05) sixteenth 18.89 (30.40) reverse 1.74 (2.80), 2.20 (3.53), 2.73 (4.40), 3.45 (5.56), 3.73 (6.00), 4.71 (7.58), 5.18 (8.34), 6.02 (9.68), 6.55 (10.54), 7.60 (12.24), 9.46 (15.22), 11.95 (19.24), 12.91 (20.78), 16.32 (26.26), 17.93 (28.86), 22.66 (36.47) Clutch single dry disc operated by foot pedal Brakes single wet disc hydraulically actuated by two foot pedals which can be locked together Steering hydrostatic Power take-off 540 rpm at 1992 engine rpm and 1000 rpm at 2090 engine rpm Unladen tractor mass 2WD - 11650 lb (5285 kg), FWA - 12810 lb (5810 kg)

REPAIRS AND ADJUSTMENTS: No repairs or adjustments.

TRACTOR SOUND LEVEL WITH CAB	2WD dB(A)	FWA dB(A)
Gear closest to 4.7 mph (7.5 km/h) 8th (1R) gear	74.0	75.0
Maximum sound level	75.0	75.0
Transport speed—no load 16th (4R+S) gear	72.0
Bystander in 16th (4R+S) gear	83.0	85.0

REMARKS: All test results were determined from observed data obtained in accordance with official OECD test procedures. The performance figures on this summary are taken from a test conducted under the OECD Code II restricted standard test code procedure.

We, the undersigned, certify that this is a true summary of data from OECD Report Nos. **1266 & 1267**, Nebraska Summary 124, January 29, 1993.

LOUIS I. LEVITICUS

Engineer-in-Charge

L. L. BASHFORD

R. D. GRISSO

K. VON BARGEN

Board of Tractor Test Engineers

TIRES AND WEIGHT		Tested Without Ballast	
		Front Wheel Assist	2WD
Rear Tires	—No., size, ply & psi (kPa)	Two 20.8-38; 8; 14 (100)	Two 20.8-38; 8; 14 (100)
Front Tires	—No., size, ply & psi (kPa)	Two 16.9-28; 8; 14 (100)	Two 11.00-16; 8; 36 (250)
Height of Drawbar		21.0 in (530 mm)	33.5 in (850 mm)
Static Weight with Operator—Rear		8325 lb (3775 kg)	8135 lb (3690 kg)
—Front		4650 lb (2110 kg)	3680 lb (1670 kg)
—Total		12975 lb (5885 kg)	11815 lb (5360 kg)

THREE POINT HITCH PERFORMANCE (OECD STATIC TEST)

CATEGORY: II

Quick Attach: None

Maximum Force Exerted Through Whole Range:

12544 lbs (55.8 kN)

i) Opening pressure of relief valve:

NA

Sustained pressure of the open relief valve:

2740 psi (189 bar)

ii) Pump delivery rate at minimum pressure:

13.4 GPM(50.6 l/min)

iii) Pump delivery rate at maximum hydraulic power:

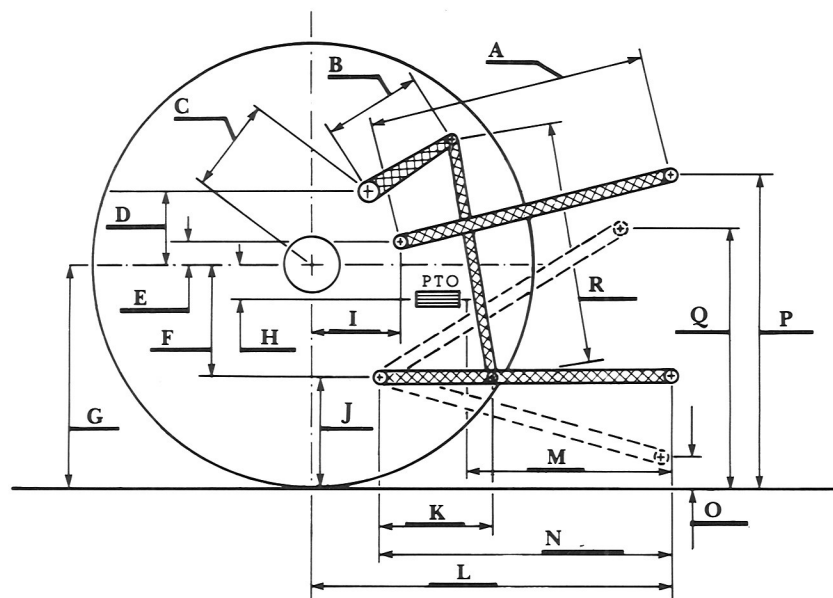
12.0 GPM(45.5 l/min)

Delivery pressure:

2510 psi (173 bar)

Power:

17.6 Hp (13.1 kW)



HITCH DIMENSIONS AS TESTED—NO LOAD

	inch	mm
A	29.5	750
B	14.3	362
C	18.5	470
D	17.0	432
E	9.3	237
F	11.8	300
G	33.7	855
H	3.0	76
I	16.9	428
J	21.9	555
K	20.7	525
L	47.2	1200
M	27.6	702
N	38.4	975
O	7.3	185
P	41.9	1065
Q	34.8	885
R	33.7	855

The following performance figures apply to the tractor equipped with a Front Drive Axle.

**DRAWBAR PERFORMANCE
FUEL CONSUMPTION CHARACTERISTICS
(Front Drive Engaged)**

Power Hp (kW)	Drawbar pull (kN)	Speed mph (km/h)	Crank- shaft speed rpm	Slip %	Fuel Consumption lb/hp.hr (kg/kW.h)	Hp.hr/gal (kW.h/l)	Temp.°F (°C) cool- ing med	Air dry bulb	Barom. inch Hg (kPa)
Maximum Power—10th (1R + S) Gear									
117.6 (87.7)	7150 (31.8)	6.16 (9.92)	2190	8	0.469 (0.285)	15.18 (2.99)	183 (84)	48 (9)	30.4 (103.1)
75% of Pull at Maximum Power—10th (1R + S) Gear									
91.6 (68.3)	5305 (23.6)	6.48 (10.43)	2247	5	0.529 (0.322)	13.45 (2.65)	189 (87)	48 (9)	30.4 (103.1)
50% of Pull at Maximum Power—10th (1R + S) Gear									
63.7 (47.5)	3585 (16.0)	6.66 (10.71)	2259	3	0.616 (0.375)	11.52 (2.27)	187 (86)	48 (9)	30.4 (103.1)
75% of Pull at Maximum Power—11th (2R) Gear									
91.5 (68.2)	5295 (23.6)	6.48 (10.43)	1804	5	0.449 (0.273)	15.84 (3.12)	187 (86)	48 (9)	30.4 (103.1)
50% of Pull at Reduced Engine Speed—11th (2R) Gear									
63.2 (47.2)	3610 (16.0)	6.57 (10.58)	1795	3	0.508 (0.309)	14.01 (2.76)	183 (84)	48 (9)	30.4 (103.1)
MAXIMUM POWER IN SELECTED GEARS									
6th (3T + S) Gear									
105.8 (78.9)	11285 (50.2)	3.52 (5.66)	2226	15	0.524 (0.319)	13.55 (2.67)	185 (85)	48 (9)	30.4 (103.1)
7th (4T) Gear									
112.1 (83.6)	10655 (47.4)	3.95 (6.35)	2217	14	0.472 (0.287)	15.13 (2.98)	183 (84)	48 (9)	30.4 (103.1)
8th (1R) Gear									
116.0 (86.5)	9125 (40.6)	4.76 (7.66)	2213	11	0.475 (0.289)	14.97 (2.95)	190 (88)	48 (9)	30.4 (103.1)
9th (4T + S) Gear									
115.7 (86.3)	8315 (37.0)	5.22 (8.40)	2197	10	0.503 (0.306)	14.16 (2.79)	192 (89)	48 (9)	30.4 (103.1)
10th (1R + S) Gear									
117.6 (87.7)	7150 (31.8)	6.16 (9.92)	2190	8	0.469 (0.285)	15.18 (2.99)	183 (84)	48 (9)	30.4 (103.1)
11th (2R) Gear									
117.5 (87.6)	5635 (25.1)	7.82 (12.58)	2188	5	0.472 (0.287)	15.13 (2.98)	185 (85)	48 (9)	30.4 (103.1)
12th (2R + S) Gear									
114.0 (85.0)	4440 (19.8)	9.63 (15.50)	2176	5	0.508 (0.309)	14.01 (2.76)	192 (89)	48 (9)	30.4 (103.1)